

CLAIMS

1. Data output controller method that controls interaction between an output device and one or more information apparatus in connection with the output device rendering content accessed with the one or more information apparatus, comprising:

managing a communication channel with the one or more information apparatus;

providing over the communication channel an output device profile associated with the output device, said output device profile enabling at least part of the content to be rasterized for rendering at the output device; and

receiving over the communication channel an intermediate output data that includes one or more raster output images for rendering at the output device, said one or more raster output images corresponding to at least part of the content and being conformed at least in part with the output device profile.

2. The method of claim 1 further comprising performing one or more image processing operations on the one or more output images included in the intermediate output data, the one or more image processing operations includes one or more of a color correction operation, a color matching operation, a color management operation, a scaling operation, an interpolation operation, a color space conversion, a compression operation, and a halftoning operation.

3. The method of claim 1 further comprising conforming the intermediate output data into an output data that is acceptable for rendering by an output engine included in the output device.

4. The method of claim 1 in which the output device is a printing device and the method further comprising conforming the intermediate output data into a print data that is acceptable to a printer controller associated with the output device.

5. The method of claim 1 further comprising delivering the intermediate output data for rendering by the output device.

6. The method of claim 1 wherein the communication channel includes a short-range wireless communication channel.

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7. The method of claim 1 further comprising providing at least part of the output device profile to the information apparatus in response to a service request received from the information apparatus.

8. The method of claim 1 further comprising providing at least part of the output device profile to the information apparatus in more than one communication session with the information apparatus.

9. In a computer readable medium, data output controller software that controls interaction between an output device and an information apparatus in connection with the output device rendering content accessed with the information apparatus, comprising:

software for storing at least part of an output device profile;

software for providing over a communication channel an output device profile associated with the output device, said output device profile enabling at least part of the content to be rasterized for rendering at the output device;

software for receiving over the communication channel an intermediate output data that includes one or more raster output images corresponding to at least part of the content for rendering at the output device and conformed at least in part with the output device profile.

10. The medium of claim 9 further comprising software for performing one or more image processing operations on the one or more output images included in the intermediate output data, the one or more image processing operations includes one or more of a color correction operation, a color matching operation, a color management operation, a scaling operation, an interpolation operation, a color space conversion, and a halftoning operation.

11. The medium of claim 9 further comprising software for conforming the intermediate output data into an output data that is acceptable for rendering by an output engine included in the output device.

12. The medium of claim 9 further comprising software for conforming the intermediate output data into a print data that is

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acceptable to a printer controller associated with a printing device.

13. The medium of claim 9 in which the output controller software is included in the output device.

14. The medium of claim 9 in which the output controller software is included in a server, an external station, a board, a card, and a data access point separate from the output device.

15. The medium of claim 9 further comprising software for calculating and collecting payment information as compensation for rendering of the content by the output device.

16. The medium of claim 9 further comprising software for implementing job management functionalities with one or more of data output job queuing and spooling.

17. In a computer readable medium, data output controller software that controls interaction between an output device and one or more information apparatus in connection with the output device rendering content accessed with the one or more information apparatus, comprising:

software for managing a communication channel with the one or more information apparatus;

software for providing over the communication channel at least an indication related to one or more data formats acceptable for rendering the content at the output device; and

software for receiving over the communication channel an intermediate output data that includes data in accordance with the one or more data formats, the intermediate output data corresponding to at least part of the content.

18. The medium of claim 17 further comprising software for converting the intermediate output data into an output data that is acceptable for rendering with the output device.

19. The medium of claim 18 further comprising software for passing the output data to the output device for rendering.

20. The medium as of claim 17 including software for providing over the communication channel information related to one

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or more of an output device identification, an intermediate output data indicator, a quality of service indicator, a price indicator, a status indicator, an output device attribute, a rasterization parameter, a format indicator, a language indicator.

21. The medium as of claim 17 further including software for receiving intermediate output data that includes at least one output image corresponding to at least part of the content for rendering at the output device.

22. The medium as of claim 17 further comprising software for retrieving image data from the intermediate output data and performing at least one image processing operation on the image data, the image processing operation including one or more of a color correction operation, a color matching operation, a color space conversion, a color management operation, a scaling operation, an interpolation operation, and a halftoning operation.

23. The medium as of claim 17 further comprising software for conforming the intermediate output data into a print data that is acceptable to a printer controller associated with a printing device.

24. The medium of claim 17 further comprising software for posting or broadcasting the output availability for service.

25. The medium of claim 17 further comprising software for calculating and collecting payment information as compensation for rendering of the content by the output device.

26. The medium of claim 17 further comprising software for implementing job management functionalities with one or more of data output job queuing and spooling.

27. The medium of claim 17 further comprising software for implementing authentication procedures that limit access to the rendering provided by the output device.

28. The medium of claim 27 including software for storing in a memory component an access control list specifying an information apparatus for which the output device will render content.

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29. A data output controller method that controls interaction between an output device and one or more information apparatus in connection with the output device rendering content accessed with the one or more information apparatus, comprising:

managing a communication channel with the one or more information apparatus;

providing over the communication channel at least an indication related to one or more data formats acceptable to the controller in connection with rendering content at the output device; and

receiving over the communication channel an intermediate output data that includes data in accordance with the one or more data formats, the intermediate output data corresponding to at least part of the content.

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